

CYCLONE TRACY

PART TWO

TWENTY YEARS LATER - A SPECIAL FEATURE

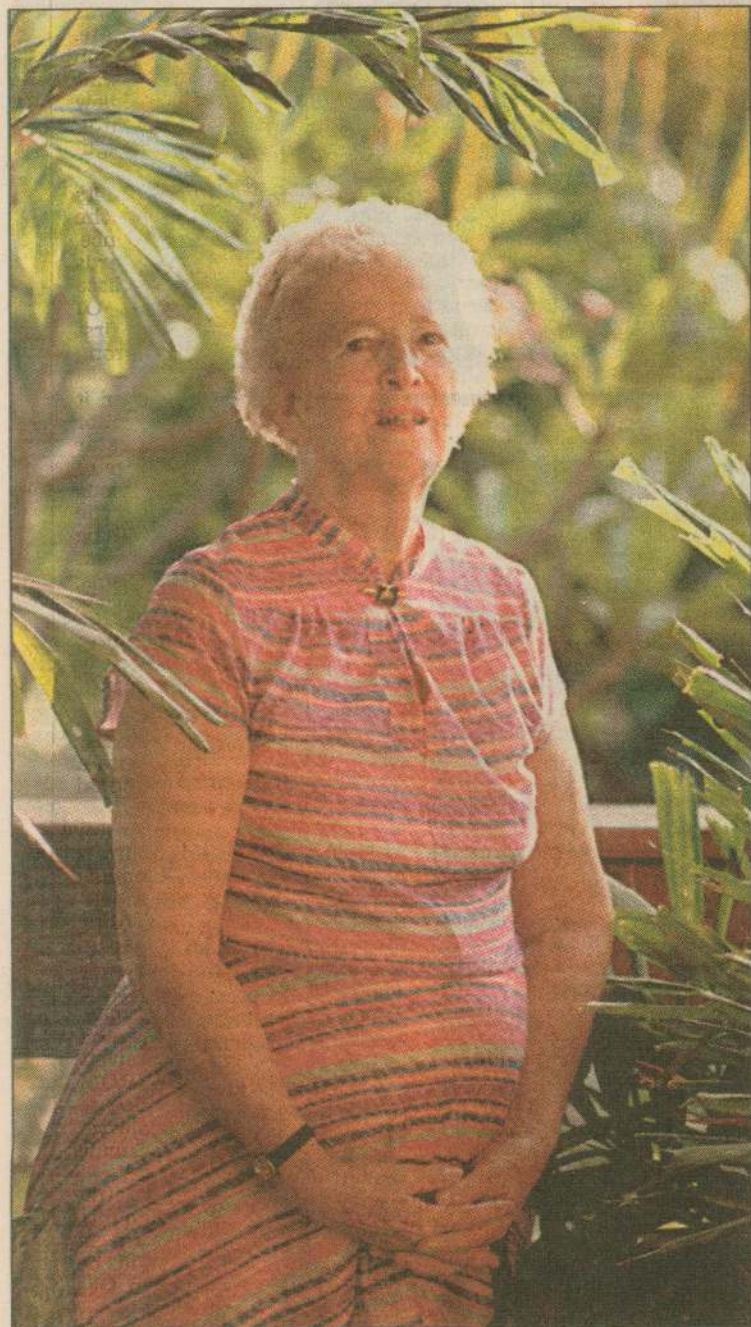


A city in tatters: many residents did not know where to begin in putting Darwin back together; some did not try and left forever

Picture courtesy of AP

The Big clean-up

Long-term resident Nancy Eddy had survived an earlier tropical cyclone and the World War II bombing of Darwin. Then, on Christmas Eve 1974, Tracy struck. In these extracts from her journals she gives a rare, eye-witness account of the devastation, isolation, and confusion that followed Christmas Day, Wednesday, December 25, 1974.



Nancy Eddy: 'I told Stuart our Christmas dinner was off'

THE night seems forever and Rex and I wonder if it will ever end, but at 6am the wind is slightly less intense. We open the laundry door and fight our way against the wind to go upstairs. The back door is still locked so we enter through the windows. All the walls are splattered with mud and finely minced leaves. Broken glass everywhere. The carpet is swimming in water and debris. In horror we found the other rooms in similar devastation. We have no radio, water, electricity, phone or sewer. Half the roof has peeled back. The remains of the Poinciana Hotel's big electric sign lie on the carpet near where it smashed through two wall panels. We are gazing in numb disbelief when Bob, the

handyman from the Poinciana, comes in a says: "Come quickly, they say it's returning!". The hotel is full of air hostesses still in their uniforms. They are all very quiet. I burst into tears. At 8am Stuart, our son, and his friends Bill and Mike arrive. They have been looking for us at the house. Their house was gone — the roof blew off and the remainder just exploded. Stuart and Mike found safety in a brick toilet. Mike climbed into the cabin of a semi-trailer. **W**HEN they drove in to see how we were they did not expect to find us. The sight was so dreadful all the way — row after row of houses were gone, just rubble. Bill and Mike left but Stuart stayed and we talked for a while. We had no plans. Our brains simply would not work.

The radio came on during the afternoon. The news was dreary indeed. The death toll, already high, was rising as more bodies were discovered in the wreckage. The radio droned on endlessly about the necessity for residents to leave Darwin and for people to go to the official listing places and register. I told Stuart our Christmas dinner was "off". He said, "I guess so," and went. **THURSDAY, DECEMBER 26:** Another sleepless night. Arose to hear the radio still pouring forth its never-ending dirge. It was most depressing. There were fearful tales of the evacuation of women and children. Everyone seemed homeless. The population had to be drastically reduced for the sake of hygiene. It was impossible to walk along the foot paths for all the piled debris.

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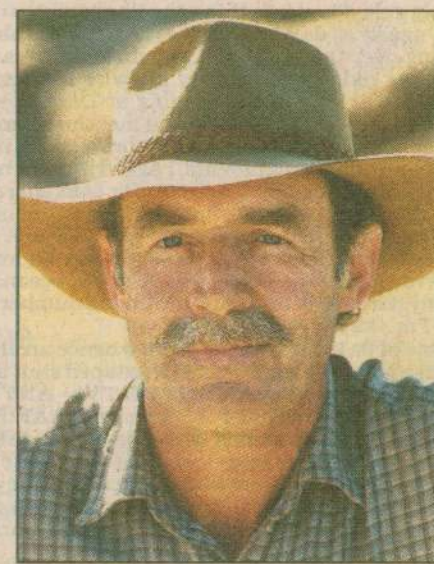


FACT FILE

- The insurance payout following the cyclone exceeded \$230 million - an Australian record at the time.
- 90% of the houses in Darwin were destroyed by the cyclone, leaving most of the city's residents homeless.
- Since its settlement in 1869 Darwin has been hit by cyclones in 1877, 1888, 1897 and in this century, 1917 and 1937.

Camera at the eye of the storm

ABC cameraman Keith Bushnell won an award for his footage from Cyclone Tracy. Here, with a photographer's eye for detail, he describes the morning after and the days ahead



Bleak picture: Keith Bushnell

THE very first light of our dawn might have been about 6am. Somehow, the wind had shifted around — no longer punching us in the back — and it died in fits.

I climbed very carefully from the cupboard space, steadying against a wall, hanging onto a door, whatever was closest, but always moving toward the outside.

I stepped through ankle-deep water washing around lots of broken glass and assorted flotsam. Two heavy roofing beams had crossed each other and rested on my colour TV.

The wind still blew in gusts, enough to frighten me when I found myself on the balcony which was now missing the iron railing that I could've held on to just yesterday. The railing had been ripped out of the concrete, leaving a rubble-strewn, rough-edged path about 60cm wide.

Lifting my eyes from this precarious platform, the next unforgettable view was of a world without foliage. Here in tropical Darwin, one accepted evergreens, palms and associated lush growth as part of every scene. Not this morning. Not only had every leaf and frond been removed from sight but many whole trees too. I don't remember what particular trees had lived in my street but I noticed that they weren't there any more. It didn't look like a neighbourhood that I'd visited.

This is when I first saw that we'd been in a cyclone. I crept past next door's flat, hugging the wall (not an easy thing to do, I discovered). A large part of the outside brick wall had fallen into the car park and a sizeable slab had come to rest on the bonnet of my Land Cruiser. I pushed off the bricks but it wouldn't start. Later that morning it did start but earlier, I believe it had been "in shock".

Three minutes later I was downtown, at the corner of Knuckey and Cavenagh streets where there was something of an electrical/hardware-type shop. It appeared relatively intact except the plate-glass window was smashed and a couple of people

(already!) were in the street, carrying stuff that could well have come from that shop. A youth rode a brand new bicycle in circles on the intersection — a bike which might have been a Christmas present. I remember no one else on foot. I remember it as if that kid on the bike smiled to me in my dream.

A cruise around town revealed the Anglican cathedral largely caved in and the equally ancient sandstone navy headquarters, on The Esplanade, was a write-off. I didn't shoot that, either. There was a ringing noise all around and as we moved through this dream it became clear that it was not just ringing in my ears: it got louder as we approached the corner of Bennett and Smith streets and came from the Reserve Bank. Right opposite the police station the bank's alarm was ringing and the heavy glass door seemed to be open but there was no other soul in sight. Nobody was home around here. It was weird.

Having seen that much of Port Darwin had taken the hiding, we drove out to the airport and saw many planes up-ended. I shot some film as I went, more like a machine on automatic than a news cameraman.

We picked our way along Bagot Road, northbound, and I noticed a lot more traffic heading into town. They'd obviously heard about the smashed city and were coming in to have a look around — even on Christmas morning and still raining. "Ghouls", I thought.

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CYCLONE TRACY

Camera at eye of the storm

From previous page
The Dolphin Hotel was 2-3km up the road from Bagot Aboriginal Reserve. Out the front of the hotel's bottle shop, a handful of our coloured brothers, with bottles in all hands, waved to the passing cars. "Probably the first free drink they ever got from there," I said to my driver, "and good luck to 'em."

I don't know where the thought crept in from, but all of a sudden I shivered (and still do, at the memory); all of this traffic wasn't coming into town to have a stickybeak. This looked like an exodus. If so, we could be in big trouble.

That was when I was frightened. The sun appeared between departing showers. Back at Stuart Park, I climbed up the still-scary flights of stairs and found my female friend, no roof above her, cleaning up! She actually had her arms in the sink, with her back to me, when I came through what would have been the front door and filmed her.

"Want to say hello to your mum?" I called. Toni turned, standing ankle-deep in wet wreckage, rubber-gloved hands and all, and smiled to the world. Some days later, I was told that this film had, indeed, been "satellited around the world". Much later still, Toni heard from friends who saw her on TV in France, Nauru and New Zealand.

I wanted to make contact with workmates to see how they'd fared so I started out again in my own car. I visited the homes of several journalists seriously wanting "somebody to hold the mike" in front of my camera. It would be more like "normal" if I could look at this world from the removed position — through the viewfinder — and see somebody who looked like he knew what he was doing. There was nobody home. In fact, some of their homes weren't home!

A cameraman (particularly an ABC one) was supposed to keep a shot list — a chronological account of what was filmed, shot by shot, and give names and pertinent details — for an editor, cutting the story, who'd otherwise not know enough about what was filmed and why. I didn't even care to look for a dry pencil and paper that day. But it was on my mind.

To make up for this unprofessionalism, I made comments once or twice as I filmed, speaking loud enough for the camera-mounted microphone to pick it up. I gave such scintillating information as, "This is Smith Street." Brilliant.

Of course, most of the journos had families and more important stuff to worry about. I don't know if any came looking for me that morning. I returned to the ABC studios in the afternoon. Inside the building, which had suffered mostly water damage, "staff wives" were collecting tinned food, feeding children and making tea on camp stoves for people like me. Thoroughly worthwhile jobs. Either these people, who'd obviously been "blown away" too, hadn't seen what I'd seen or they were of sterner stuff than I.

Some of "their men" (and I'll swear to what I saw, just then) sat together on the front steps of the building, in the sun. Somebody had a portable radio and on its short-wave signal I heard some commentary on a cricket match which was being played in Perth. I promise you, it was most reassuring to know that out there, only a few thousand kilometres away, a world still functioned normally. It was a great lift.

But then the fall. Soon after and for the second time that day, I felt a wave of fear. The radio picked up a bit of a news service. In this news break, and I don't think it was even the lead item, it was reported something like: "Darwin was last evening known to have been approached by a cyclone but there has been no report ... And now, here are the cricket scores ..."

Holy shit. They just think the lines are down. Here I was, nearly a day later, expecting the cavalry to be coming over the horizon at any moment to save us all and they didn't even bloody know! I felt very much alone just then. On the evening of December 25th, I drove out to the RAAF base and met the commanding officer, Dave Hitchins, a good sport who I'd met on a number of film assignments. I asked if there had been any traffic in or out that day. He said there hadn't been. I wanted to be rid of my footage so I handed him a cardboard box, containing one 400-foot roll of exposed film. There was also a note addressed to whoever found the bottle tossed in the ocean, "please call my parents at this Adelaide phone number and say that I'm okay".

None of us knew when or from whence an aeroplane would come. The small parcel was taped shut and with a marking pen I wrote on it, "ABC TV — ANYWHERE". IN the early hours of the 26th an RAAF Hercules did land in Darwin and then departed, taking my parcel of film, which — apart from some dutiful compunction I felt to provide — I cared little about.

Later, I learned that the parcel had been taken to the ABC studios in Brisbane, processed, and transmitted



Sense of duty: Bushnell at work

around the country and the world. That 10 minutes of film was, for a whole day, the only pictures anybody had.

At the time the news stories written were being shuttled down to the wharf where a ship had recently come into port. They were sending their stuff out using the ship's short-wave radio.

I'd been in Darwin for about three years but I felt an "outsider" to some degree: not actually being one of the ABC's staff, I was merely a contractor.

ONE, incidentally, who was now clearly out of business: no longer having a film processor to fulfil a contract for a TV station that was no longer on air. I asked the journalist-in-charge to find out if it was okay for me to take off — there seemed to be plane loads of cameramen coming from all over to do the other stuff. Anyway, they must have had access to a working telephone by the next day because I was informed that if I wanted to leave, the news editor down south had approved it.

I filled the car's long-range tank and several jerry cans with petrol at a bulk fuel depot. Until they got generators going, regular garages did not have electricity to lift the fuel to the pumps. I reckoned we'd get a safe distance with what I carried. And just as well because here's where I heard another rumour: "Oh no, mate, you won't be able to fill up in Katherine. They've been blown away, too!"

We loaded up and set off that evening. Toni had squashed into every corner garbage bags full of soft wet stuff. What was in the bags, I didn't ask or care.

As soon as we were on the Stuart Highway we found ourselves in a convoy. Through the night we encountered vehicles, many of them racing, that might have driven straight into the Mad Max movies. Some had been crushed by falling trees and buildings but underneath, apparently, they were mechanically sound enough. Whole families crouched in crumpled tin boxes on wheels. Some had the boot lid removed and some, riding very heavily in the arse end, carried a 44-gallon drum. Full of petrol, I supposed. They'd have gone off with a bang.

Many cars (without windscreens) had a desperate man at the wheel, surrounded by wife, children and pets, heading south as fast as he could go, with what little they'd saved. The atmosphere in this one-way rush (the only way out at that time — unless you had a connection with the military) compelled the stronger cars to overtake the weaker ones. Obviously, there was little northbound traffic: so why not use the extra lane? When you moved out to take that space, another followed. People did some dangerous things.

I couldn't help but join in what felt, at times, like a headlong rush. Some must have believed that they were running for their lives. But being there, one was swept along. It was frightening but I also felt some relief. I gripped the wheel and was a part of it. In the last light of that day and into the night, we ran through showers with lightning cracking a whip at our tails. Don't look back.



Damage beyond control: as locals began to survey the wreckage on the day after the cyclone, it became clear that most of the town had been flattened. A mass exodus by road began, leaving a few locals and emergency services personnel. Pictures courtesy of Barry Ledwidge



After the nightmare, the big clean-up

From previous page
THE sight of the roofless, shattered houses was quite overwhelming.

At home I picked through the wet and sagging kitchen cupboard to find something to eat. There was not a dry spot in the house. FRIDAY, DECEMBER 27: The water carts start delivering water to those who need it. I heard them calling out, grabbed a garbage can and rushed out the front gate to get the precious liquid.

Later the garbage collectors came and called out for any scraps or rotting food. It was most essential to keep garbage under control in case of epidemics.

The radio was on about it all the time. More people have left, over 6000 in one day. One jumbo jet had 600 souls aboard. I was glad not to be on that. The radio is announcing people must have typhoid and tetanus shots and I drove to the hospital to get mine. Rex did not bother. Stuart came in to say goodbye. He and Bill and Mike are leaving for Brisbane.

He gave me his Christmas present — a book which I had chosen. It was sadly beaten-up, the cover gouged by

something, but still readable. I am very disappointed at all my books lost and try hard not to worry about them too much. People are dead.

Rex drove to the dump and was appalled by the suburbs — just masses of rubble, not a single house standing. He said it was heart-wrenching to see.

We heard over the radio a rescue squad had found an old lady of 73 pinned down by a large beam under her house. She said: "I knew you would come for me — can I have a drink of water?"

The radio continually exhorts us to clean up, observe scrupulous hygiene, or evacuate. Several thousand more have gone now, in vehicles of all descriptions.

They are being given petrol and assistance along the way. The powers that be don't care how people go, as long as they go. SATURDAY, DECEMBER 28: Today, thank heaven, our water supply was restored. There is not enough pressure for a shower but we can wash from the kitchen taps. Already the place smells better.

Food is being flown in and our depot is Darwin High School. The queues stretch forever but the food is

in large containers more suitable for institutions than small families. Some people go mad and push and shove and break open large cartons, spilling goods and trampling them. A terrible wastage. Found out of all things, there was NO TEA. I could have cried.

At the post office people once again are pushing and shoving. We have to write out our name and address and

"I waited. My name is called — a telegram at least. Someone cares"

hand it in. The crowd was so dense I wrote my name on a piece of card while leaning it on a man's back. He never even looked around.

I waited. My name is called — a telegram at least. Someone cares. SUNDAY, DECEMBER 29: The radio says we can ring south. Long, long, queues at the post office at each phone.

Notices say two minutes only. Nothing to pay.

At home the carpet in the sitting room is still squelchy wet and

splintered with glass. But the pressure in the taps is better, so was able to have a shower.

MONDAY, DECEMBER 30: Went to bed last night at 8pm and still did not sleep. I cannot understand it.

I work all day, mostly standing in queues, it seems, take sleeping tablets at night but still toss and turn.

I got up a dozen times and read a book by lamplight. It is very hot

without a fan.

TUESDAY, DECEMBER 31: The radio says we can now get ice. Hot-foot it out to Carba Ice and join another long queue. It took 90 minutes to get to the door but I grabbed my bag with thankfulness.

Someone gave me a packet of tea. Eight days without — it was a heavenly brew.

After dinner Bob the handyman from the Poinciana came over. He was in a terrible state and cried his eyes out. The hotel is filled to the

brim with hundreds of people and he has worked day and night trying to keep the place clean and orderly. But no one will co-operate.

Parties are being held all over the place, with candles and lamps being used carelessly. Bob is afraid the place will go up in smoke and feels defeated by all he is trying to cope with.

The crowning insult came when a public servant asked Bob to clean his dog's dish. Animals are forbidden in crowded hotels because of the risk of infection.

Rex gave Bob a couple of whiskies and after an hour or so he felt better and returned to the hotel.

WEDNESDAY, JANUARY 1: First day of the new year but there is little rejoicing. Just toil.

They issued a newspaper for the first time. The photos are frightful. The radio announces meat is now available and I add that to my other queues.

My daily round is now to the news to get a paper; to the post office in the vain hope of telegrams and letters; to Carba for ice; to the school for food; to Geranium Street for meat. Dozens of other household cleaning jobs have to be fitted in between.

Rex is busy too and he tells me

what is happening from the radio and where to get things as they become available.

JANUARY 2: Mobs of bulldozers have now moved into the city area to start cleaning up the dreadful debris everywhere.

Queued for an hour and received \$103, the married couples' allowance, from Social Security. It is distributed to people who were in Darwin on the night of the cyclone.

The radio announced everyone must either work or get out. I think it is a ploy to get rid of the hippies as they are cluttering up all the hotels, sometimes dozens to a room.

At home I made lamb chop stew, enough for two days. SATURDAY, JANUARY 4: Rex has finished patching the roof and it is watertight — I hope.

Not a leaf is left on any tree and the bare branches look quite spooky. On the news we hear thousands of people who left in a hurry are now clamouring to return.

Food is plentiful but distribution mismanaged. We are still continually exhorted by the radio to be extremely careful over hygiene. Never have I been so admonished to do this, that and the other. But it is for our own good.

The air is filled with the noise of generators. I wish I had one too but, they are \$500 and Mary Roe told me, she was No. 756 on the list. In the evening a loud cheer comes from the Poinciana. I look out and see the lights going on floor by floor. I heartily wish the same for us but our power lines blew away with the verandah.

SUNDAY, JANUARY 5: No ice or meat available today — it has been declared a holiday, but I wouldn't notice it.

MONDAY, JANUARY 6: Went to the high school for food and the women at the special counter thrust two chickens into my nerveless grasp. Also got soft drink, tomatoes and cordial.

For the first time in my life I am setting the table without a cloth — but I use mats. We lunch on hot chicken, cold tomatoes and lettuce. We are, as my Polish friend says, "living like kinks!" Bob the handyman moved in under the house today. The government has requisitioned the hotel for the Department of Housing and Construction. Two young policeman knocked at the door to see how we were getting on. We said we were OK. They were glad, they said.

CYCLONE TRACY

Not just a cyclone, a whopping great wind of change



Optimistic: Marshall Perron

FOR many, Tracy was an opportunity to draw the line — to be evacuated "back down south" or to dig in and stay with Darwin.

For the Perrons, as with many of the old Darwin families of the inner suburbs, there was no choice. We were of Darwin, and there was not where else to go.

So it was a matter of rebuilding our lives. Darwinites who had been evacuated came back, lived among the ruins of their wrecked houses, but were happy to be back on their little piece of Australia.

And even as the arguments continued as to whether Darwin should be rebuilt or relocated, many new Darwinites came north to join in the task of reconstruction. Many are still here.

Those tradesmen and construction

workers were the start of the Territory's post-cyclone population boom. With the Territory's first fully-elected Parliament only a few months old, it was obvious Tracy was not the only generator of winds of change in the north.

If Territorians could have a say in their own affairs and we could build Australia's newest city, surely we could do other things differently as well?

Like look at the map, and decide it was time for Darwin to use its unique position as Australia's closest city to Asia, to become the regional hub for cultural exchanges, trade and commerce.

Before Tracy, Territory cattle and produce went south.

The only real exports were minerals such as bauxite and manganese. But the population in general, and my Cabinet colleagues in particular, knew that to develop the Territory's awesome potential, we had to develop markets to match.

And that meant securing our transport links to southern Australia, and simultaneously developing relationships and trade links with our northern neighbours.

Even before we achieved self-government in 1978, I led a trade mission to South-East Asia in my role as Cabinet

minister on treasury matters. Other ministers followed, including all four chief ministers.

As our recognition level developed in the halls of power in the ASEAN capitals, so Territory primary producers, contractors and merchants developed product at home, then accompanied government ministers into Asia to turn our political contacts into commercial links.

As Chief Minister, I appointed Shane Stone Australia's first Minister for Asian Relations and Trade.

The strategy has worked. Darwin and the Territory are now

regarded as the place to deal between the market places of Australia and Asia. Territory cattle, fish, fruit, vegetables, scientific and educational expertise have now joined minerals on the multi-million dollar export trail out of Darwin.

A Newpoll survey conducted by the Business Asia magazine found an overwhelming majority of Australian companies found the Territory the best place to deal with in Asia.

So 20 years after Tracy, the new city of Darwin is more than the capital of the emerging seventh State.

The Territory is at the leading edge of Australia's commercial and cultural engagement with the Asian nations.

And more particularly, their "Tiger" economies.

Since Tracy struck 20 years ago, Darwin has emerged as a dynamic gateway to the economies of Asia, argues Marshall Perron

A blow to tradition

If or when another Tracy bears down on Darwin, will the city blow away again? Peter Ward asks the experts

CYCLONES have battered parts of Australia's Top End for as long as memory, which in the case of Europeans begins in 1824. Since then the belief has grown that a bad blow comes every 40 to 50 years.

Experts are divided over how the city will fare in the tempest next time. In the 20-year aftermath of Tracy the rules and codes for house building have been rewritten three times and the "engineered" house is now the norm not only in Darwin but increasingly throughout Australia.

Nevertheless, prognostications for Darwin's housing stock range from gloomily pessimistic assessments by some architects to cautiously optimistic ones by some engineers. At the heart of the difference lies a half-century old debate over what is the best form of housing in Australia's tropics.

Should you design houses to suit the temperature or the temper of the climate - an airy, shady, lightweight, cooling structure, or, as some wonder, if not advocate, an earth-hugging suburbanised bunker?

Until the 1940s, most Darwin housing had an unmistakable and engaging tropical style - houses were lightweight, stilted, hip-roofed in iron, deeply shaded, and surrounded by propped shutters and louvres.

Especially notable were the stilted government houses designed in the 30s by the architect Beni Carr Glyn Burnett which had large veranda areas, louvered walls, shuttered shaded windows, and well ventilated open iron hip roofs.

A number of Burnett houses still stand, having survived cyclones and, more recently, heritage classification.

Elements of their style can be traced back to northern Australia's earliest European settlements and can be seen as a natural response to climate, materials to hand, and possibly even Macassan building forms.

From 1824 to 1849, NSW successively established and abandoned three naval bases at the Top End, including Port Essington on the Cobourg Peninsula, about 300km north-east of present-day Darwin.

In 1839, settlers in Port Essington were the first to gaze into the eye of the storm as it paused above the remnants of their lightweight thatched houses, having destroyed a ship in the harbour, taken its crew and, among other things, knocked Government House off its stilts.

Darwin, called Palmerston until 1911, was settled in 1869 and suffered cyclones in 1878 and 1882, but the first big blow came in 1897 when 28 lives were lost and great damage was occasioned to property.

Palmerston then had a total non-Aboriginal population of 4000, made up of Chinese, Japanese and Malay labourers and 400 Europeans.

The town's administrative buildings were made of stone but according to contemporary accounts galvanised iron or bark hip roofs, sawn timber, canvas walls and breezy woven shutters characterised the housing.

ANOTHER cyclone came in 1937, killing five people, but then came Tracy, which bore down now on a city of 48,000.

Its huge toll of dead, injured and homeless has set a harrowing benchmark.

"Tracy was a rare event," says George Walker, the engineer who in 1975 headed the team which wrote the first official report on the cyclone's damage to the built environment.

"The year 1897 might have been as big, although I think such cyclones as Tracy are more likely to be 200-year events," he says.

"Tracy's magnitude in terms of winds was horrific, when you think about it. I don't think we've experienced those sorts of winds virtually anywhere in the world."

Walker's report for the Department of Housing and Construction was completed in March 1975 after just over two months of intensive survey work by a hastily assembled

team of experts. It estimated that Tracy's maximum-gust velocities had been in the order of 130 to 140 knots, or a devastating 240km/h to 260km/h.

The team found that Darwin's housing had performed "extremely badly", particularly in the newer northern suburbs, that between 50 and 60 per cent of houses were damaged beyond repair, and that in some suburbs the destruction was almost 100 per cent.

More than 90 per cent of all houses and approximately 70 per cent of all other structures had suffered significant loss of roofing. And in particular they found that all types of roof cladding had proved inadequate and that houses which depended on cladding for bracing had failed as the cladding was torn off by wind or wind-born debris.

OTHER key problems were that concrete masonry and the detailing and tying down of bond beams in masonry construction had performed poorly, and that overall there had been a general lack of structural integrity due to the inadequate tying together of structural elements.

They also found that wind-blown roof cladding and falling masonry had been the major danger and the cause of many deaths and injuries.

They reported that if a similar disaster were to be prevented in the future there needed to be a radical change in the approach to housing construction in tropical cyclone-prone areas.

Their key recommendations were that house builders' rules of thumb, conventional practices, materials and fixings should be exhaustively examined, building codes rewritten, and that all houses should have their structural design certified by an engineer or qualified surveyor, and their construction supervised.

By and large all the report's recommendations were heeded and Darwin housing is now engineered to cyclone standards.

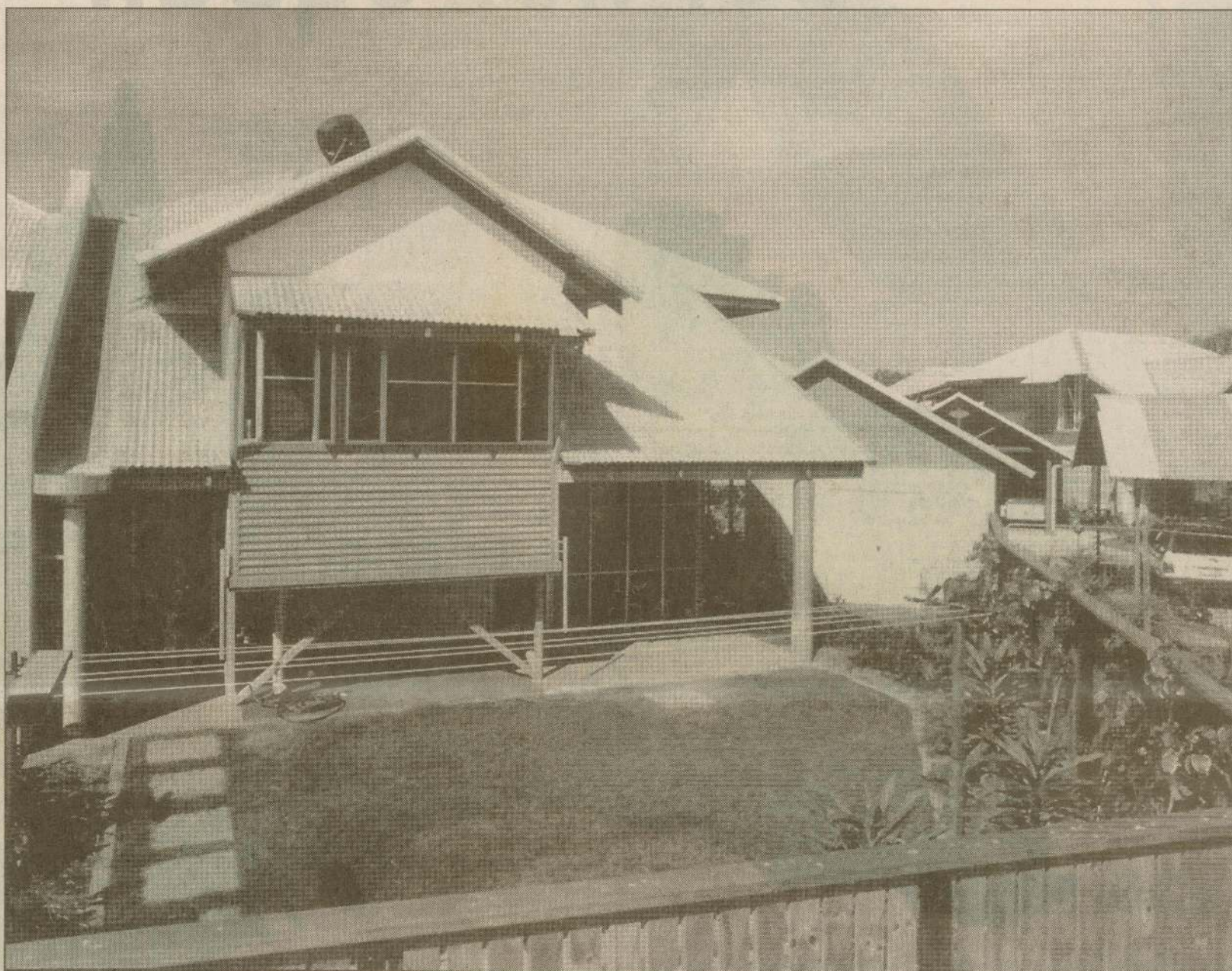
As a consequence, Walker says he believes that if another Tracy hit Darwin the damage losses would only be "a fraction" of the former disaster even though the city's rapidly growing population is now 73,000.

"There won't be so much debris because a lot of the debris was from falling buildings and from roofing iron, though you're not going to get rid of flying pieces of trees and things like that," he says.

"Roofing iron was the major part of the debris, so the debris load will be very much less; nevertheless you will get some, you will get some windows broken, and so you'll get some internal problems, so the interiors will still be a mess.



Change of plan: these houses are relatively new to the tropical Top End



Safety in the suburbs: should Darwin design for events that happen once every few decades?

Pictures courtesy of Troppo Architects

"The damage will be nothing to compare with Tracy because what happened then was when windows broke the roof took off but now they're well tied down and the iron has been designed to cope with fluctuating loads.

"The basic structure of the houses will perform very much better so you won't get a lot of major structural failure - you'll always get one or two - but you still will get some contents damage."

BUT not everybody is as sanguine about the tempest next time nor the design outcomes of engineered buildings.

The head of the Northern Territory University's department of architecture and building, Richard Luxton, is particularly critical of the "machine gun pillbox mentality" which has developed

after Tracy. He argues that a "narrow-minded engineering approach" to housing at the Top End is ignoring its century-old tropical architectural heritage and producing a bland, energy inefficient, inappropriate housing form.

He points to the award winning lightweight housing designs of Troppo Architects' Philip Harris and Adrian Welke as a healthy but relatively rare antidote to the engineered ground-hugging concrete-block-on-slab solutions which now spread across the broad suburban acres of Sanderson, Casuarina and Palmerston.

"We should be saying to builders, 'don't make the fairy a pillbox, leave it so that it is fairly open,'" he says.

"Accept that for four hours once every 40 years on average there will

be a cyclone that comes through, breaks a few windows and puts a bit of rain through the place.

"If you don't lose the roof you can always fix up a few windows and the flywire."

He also points out that that it is incorrect to argue that the engineered, and therefore safer, house is a post-Tracy development. "Ninety-five per cent of pre-

Tracy housing had been built by the Northern Territory Housing Commission or the Commonwealth Board of Works and every drawing that was put out had the signatures of the chief design architect and an engineer."

But perhaps the gloomiest prognosis comes from Darwin architect Peter Dermody, who worked on one of the first damage assessment teams of the Tracy clean-up, and remains chilled by the "awesome" force of the storm.

"Straight after Tracy I went to my office and pondered deeply on the ideal form of house construction for Darwin because the key thing is impact damage," he says.

"Now I think the building requirements are almost back to normal, thin sliding glass windows are being put in again, there are more trees in Darwin now than

"But the only thing I could think of was earth mounded houses, or you could use reinforced concrete of a certain thickness, or the cyclone wire used in front fences which all stayed up and collected debris."

Peter Dermody saw out Tracy in the old concrete and steel gun emplacements on East Point and says these days that in the event of a big blow he may go to the museum, where he has friends, which has strong concrete store rooms.

"But if things began looking very serious I think I'd get out, ring the insurance company, and go down to Katharine. I don't feel in the least bit optimistic, it worries me a lot - people think they're safe in their little cyclone-proof house, it would be better if they got out."

"The trouble is everyone would be leaving town at the same time."



Prime target: Darwin lay right in the path of Cyclone Tracy

Exhibition testament to tenacity

A new exhibition in Darwin highlights the themes of growth and renewal. Julian Cribb reports

FOUR times in a century Darwin has been destroyed. After each disaster it has risen, phoenix-like, from the rubble and taken on a fresh guise.

Three major cyclones — in 1897, 1937 and 1974 — almost razed the city, while in the 1940s Japanese bombers followed by Australian and American looters inflicted equal punishment on homes and property.

Disaster has been experienced by just about every generation: in 1839, the early settlement of Port Essington on Cobourg Peninsula was obliterated by a "hurricane". In 1878, Darwin — then known as Palmerston — sustained heavy cyclone damage, and again in 1881 and 1917 heavy gales damaged virtually every home and building.

Historians still debate which was worse: the 1897 cyclone which obliterated the city on January 6-7 or Cyclone Tracy on Christmas Eve 80 years later.

But besides being a tale of destruction, the story of Darwin is also one of renewal. Each time the city has returned better planned sometimes with more gracious architecture, always more vigorous.

Rather than dwell on the devastation, the Northern Territory Museum and Art Gallery has chosen to chronicle the rebirth, says the designer of the 20th anniversary exhibit, Dr Mickey Dewar.

"It seemed an occasion for a new approach; to find a way to put the disaster in context," she explains. "To see ourselves as living in northern Australia, amid the nature in which the city exists. Each architectural phase of development has been wiped out by a disaster, to be followed by a new phase. We also wanted to show how it affected culture and lifestyle."

The display takes visitors inside a typical home from three periods of the city's history — a gracious old pre-World War II home which recalls the colonial era, the controversial postwar Commonwealth housing and the post-Tracy concrete ground-level fortifications which cover much of Darwin today.

It also sees Tracy through the eyes of artists, cartographers and Aborigines, who have devised a dance cycle to commemorate it.

AMONG the most eerie items on display is an elaborate piece of jewellery formed partly of debris by two French artists, Pierre Cavalan and Marc Kalifa. But the most potent exhibit is aural rather than visual: the haunting voices of the cathedral choir celebrating Mass late on Christmas Eve, drowned by the explosive violence of the cyclone as it swoops on them.

The exhibition is the first to chronicle the reaction of the Aboriginal inhabitants of the north, veterans of cyclones — which they attribute to the primal ancestor, the rainbow serpent — for more than 60,000 years.

A year after Tracy, Geoffrey Mangalamarra from the north-west Kimberley region was given the Cyclone Tracy dance cycle in a dream. Hundreds of kilometres away at Turkey Creek, Rover Thomas also dreamed a dance cycle he called Gurirr Gurirr. These became part of renaissance rituals used across the north and later were depicted in many artworks where the force of the winds was likened to a vast boulder smashing down from a cliff on helpless humans below.

Twenty years after Tracy we're strong but not equal.



The Northern Territory has ranked amongst the top national economic performers for the past ten years.

Excelling in forging relationships in the dynamic Asia Pacific region we've made a tremendous contribution to national growth.

An interim charter towards statehood granted by the Commonwealth in 1978, marked the beginning of unprecedented prosperity.

And most importantly, standing along side all other Australians, Territorians have supported equality in every aspect of life.

Yet we are still denied the constitutional rights enjoyed throughout the rest of the country. As the centenary of Federation draws closer and we strengthen our commitment towards building a truly equal nation, all Australians should recognise the need for a seventh sovereign state.

Territorians urge Australia to share its political rights with them. After all, learning to share is all part of growing up.

Australia's Northern Territory

